

FORM PTO-1390  
(REV. 1-2004)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER  
36470-231117**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371**U.S. APPLICATION NO. (If known, see 37 CFR  
1.5) 10/079071INTERNATIONAL APPLICATION NO.  
PCT/KR2004/002716INTERNATIONAL FILING DATE  
October 25, 2004PRIORITY DATE CLAIMED  
November 11, 2003

## TITLE OF INVENTION

**METHOD OF ISOLATING AND CULTURING MESENCHYMAL STEM CELL DERIVED FROM CRYOPRESERVED UMBILICAL CORD BLOOD**

## APPLICANT(S) FOR DO/EO/US

**Hoon HAN and Sung-Whan KIM**

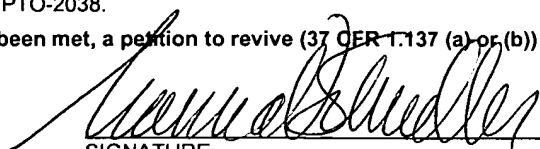
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.
4. ☐ The US has been elected by the expiration of 19 months from the priority date (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2)), published as **WO 2005/045011 A1**
  - a. ☒ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ has been communicated by the International Bureau. (attach form IB 308)
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☒ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4)
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)).
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☒ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

**Items 11 to 20 below concern document(s) or information included:**

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98, with 2 references.
12. ☒ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☐ A FIRST preliminary amendment.
14. ☒ An Application Data Sheet under 37 CFR 1.76.
15. ☐ A substitute specification.
16. ☐ A power of attorney and/or change of address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.
18. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).
19. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
20. ☒ Other items or information: Forms PCT/IB/306; PCT/ISA/210 and PCT/RO/101

This collection of information is required by 37 CFR 1.414 and 1.49-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SENT TO: Mail Stop PCT, commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>22-0261</b>		INTERNATIONAL APPLICATION NO. PCT/KR2004/002716		ATTORNEY'S DOCKET NUMBER 38470-231117	
21. The following fees are submitted: <input checked="" type="checkbox"/> a) Basic national fee .....\$300.00 <input checked="" type="checkbox"/> b) Examination fee .....\$200.00 <input checked="" type="checkbox"/> c) Search fee .....\$500.00 <div style="text-align: right;"><b>TOTAL OF ABOVE CALCULATIONS = \$1000.00</b></div>				\$ 300.00 \$ 200.00 \$ 500.00 \$ 1,000.00	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheet (excluding sequence listing or computer listing field in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra sheets	Number of each additional 50 or fraction Thereof (round up to a whole number)	RATE		
12 -100 =	/50 =		x \$250.00		
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$	
Total claims	3 - 20 =	0	x \$50.00	\$	
Independent claims	1 - 3 =	0	x \$200.00	\$	
MULTIPLE DEPENDENT CLAIMS(S) (if applicable)			+ \$360.00	\$	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				\$ 1,000.00	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				+	
<b>SUBTOTAL =</b>				\$ 1,000.00	
Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$	
<b>TOTAL NATIONAL FEE =</b>				\$ 1,000.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				+	
<b>TOTAL FEES ENCLOSED =</b>				\$ 1,040.00	
				Amount to be refunded:	\$
				Amount to be charged:	\$ 1,040.00
a. <input type="checkbox"/> A check in the amount of \$ _____ to cover the above fees is enclosed. b. <input checked="" type="checkbox"/> Please charge my Deposit Account No. <u>22-0261</u> in the amount of <u>\$ 1,040.00</u> to cover the above fees. c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>22-0261</u> . A duplicate copy of this sheet is enclosed. d. <input type="checkbox"/> Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.					
<b>NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.</b>					
SEND ALL CORRESPONDENCE TO: VENABLE LLP P.O. Box 34385 Washington D.C. 20043-9998 Phone No. 202-344-4000 Fax No. 202-344-8300					
				SIGNATURE  Marina V. Schneller NAME 26.032 REGISTRATION NUMBER	